IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF OHIO

UNITED STATES OF AMERICA,)
Plaintiff,)
v.) Civil Action No.
AMERICAN ELECTRIC POWER)
SERVICE CORP., INDIANA)
MICHIGAN POWER CO., d/b/a)
AMERICAN ELECTRIC POWER)
OHIO POWER COMPANY, d/b/a)
AMERICAN ELECTRIC POWER,)
APPALACHIAN POWER COMPANY,)
d/b/a/ AMERICAN ELECTRIC POWER;)
CARDINAL OPERATING COMPANY;)
and CENTRAL OPERATING COMPANY,)
)
Defendants.)
)

COMPLAINT

The United States of America, by authority of the Attorney General of the United States and through the undersigned attorneys, acting at the request of the Administrator of the United States Environmental Protection Agency ("EPA"), alleges:

NATURE OF THE ACTION

1. This is a civil action brought against the defendants pursuant to Sections 113(b)(2) and 167 of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7413(b)(2) and 7477, for injunctive relief and the assessment of civil penalties for violations of the Prevention of Significant Deterioration ("PSD") provisions and New Source Performance Standards ("NSPS") of the Act, 42 U.S.C. §§ 7470-92 and 7411, respectively. Numerous times, the defendants significantly modified, and

thereafter operated, their electric generating units at the Tanners Creek, Muskingum River, Cardinal, Mitchell, and Philip Sporn coal-fired electricity generating power plants in Indiana, Ohio, and West Virginia without first obtaining appropriate permits authorizing this construction of modifications at these units and without installing the best available control technology to control emissions of sulfur dioxide, nitrogen oxides, and particulate matter, as the Act requires.

- 2. As a result of defendants' operation of these plants following these unlawful modifications and the absence of appropriate controls, massive amounts of sulfur dioxide, nitrogen oxides, and particulate matter have been, and still are being, released into the atmosphere aggravating air pollution locally and far downwind from these plants. Defendants' violations, alone and in combination with similar violations at other coal-fired electric power plants, have been significant contributors to some of the most severe environmental problems facing the nation today. An order of this Court directing the defendants to install and operate the best available technology to control these pollutants in conjunction with orders being sought in similar cases involving other coal-fired electric power plants in the midwest and southern United States being filed by the United States concurrent with the filing of this complaint, will produce an immediate, dramatic improvement in the quality of air breathed by millions of Americans. It will reduce illness, protect lakes and streams from further degradation due to the fallout from acid rain, and allow the environment to restore itself following years, and in some cases decades, of illegal emissions.
- 3. Sulfur dioxide, nitrogen oxides, and particulate matter when emitted into the air can each have adverse environmental and health impacts. Electric utility plants collectively account for about 70 percent of annual sulfur dioxide (SO₂) emissions and 30 percent of nitrogen oxides

(NO_x) emissions in the United States. SO₂ interacts in the atmosphere to form sulfate aerosols, which may be transported long distances through the air. Most sulfate aerosols are particles that can be inhaled and according to recent studies, high levels of sulfate aerosols are associated with increased sickness and mortality from lung disorders, such as asthma and bronchitis. Lowering sulfate aerosol emissions from electric utility plants may significantly reduce the incidence and the severity of asthma and bronchitis and associated hospital admissions and emergency room visits.

- 4. Nitrogen oxides ("NO_x") are major producers of ground level ozone, which scientists have long recognized as being harmful to human health. NO_x, transformed into ozone, may cause decreases in lung function (especially among children who are active outdoors) and respiratory problems leading to increased hospital admissions and emergency room visits. Ozone may inflame and possibly cause permanent damage to people's lungs. NO_x is also transformed into nitrogen dioxide (NO₂), a dangerous pollutant that can cause people to have difficulty breathing by constricting lower respiratory passages; it may weaken a person's immune system, causing increased susceptibility to pulmonary and other forms of infections. While children and asthmatics are the primary sensitive populations, individuals suffering from bronchitis, emphysema, and other chronic pulmonary diseases have a heightened sensitivity to NO₂ exposure. NO_x also reacts with sunlight and other pollutants to form photochemical smog, which in turn contributes to haze and reduces visibility.
- 5. SO₂ and NO_x interact in the atmosphere with water and oxygen to form nitric and sulfuric acids, commonly known as acid rain. Acid rain, which also comes in the form of snow or sleet, "acidifies" lakes and streams rendering them uninhabitable for aquatic life, and it

contributes to damage of trees. Acid rain accelerates the decay of building materials and paints, including irreplaceable buildings, statues, and sculptures that are part of our nation's cultural heritage. SO₂ and NO_x gases and their particulate matter derivatives, sulfates and nitrates, contribute to visibility degradation and adversely affect public health. In this civil action, and in other civil actions filed concurrent with it, the United States intends to reduce dramatically the amount of SO₂ and NO_x that certain electric utility plants have been illegally releasing into the atmosphere. If the injunctive relief requested by the United States is granted in this case, and in others filed concurrent with it, many acidified lakes and streams will improve so that they may once again support fish and other forms of aquatic life. Visibility will improve, allowing for increased enjoyment of scenic vistas throughout the eastern half of our country. Stress to our forests from Maine to Georgia will be reduced. Deterioration of our historic buildings and monuments will be slowed. In addition, reductions in SO₂ and NO_x will reduce sulfates, nitrates, and ground level ozone, leading to improvements in public health.

6. Particulate matter is the term for solid or liquid particles found in the air. Smaller particulate matter of a diameter of 10 micrometers or less is referred to as PM-10. Power plants are a major source of particulate matter ("PM"). Breathing particulate matter at concentrations in excess of existing ambient air standards may increase the chances of premature death, damage to lung tissue, cancer, or respiratory disease. The elderly, children, and people with chronic lung disease, influenza, or asthma, tend to be especially sensitive to the effects of particulate matter. Particulate matter could also make the effects of acid rain worse, reducing visibility and damaging man-made materials. Reductions in particulate matter illegally released into the

atmosphere by the defendants and others will significantly reduce the serious health and environmental effects caused by particulate matter in our atmosphere.

JURISDICTION AND VENUE

- 7. This Court has jurisdiction of the subject matter of this action pursuant to Sections 113(b) and 167 of the Act, 42 U.S.C. §§ 7413(b) and 7477, and pursuant to 28 U.S.C. §§ 1331, 1345, and 1355.
- 8. Venue is proper in this District pursuant to Section 113(b) of the Act, 42 U.S.C. §§ 7413(b), and 28 U.S.C. § 1391(b) and (c) and 1395(a), because the defendants reside in this District, because many of the violations occurred in this District, and two of the facilities that are the subject of the complaint, the Muskingum River and Cardinal plants (described below), are located in this District.

NOTICES

9. The United States is providing notice of the commencement of this action to the States of Indiana, Ohio, and West Virginia, as required by Section 113(b) of the Act, 42 U.S.C. § 7413(b).

THE DEFENDANTS

- 10. Defendant American Electric Power Service Corporation ("AEP Service Corp.") is a New York Corporation and is an operator of each facility that is the subject of this Complaint.
- 11. Defendant Indiana Michigan Power Company, d/b/a/ American Electric Power ("Indiana Michigan"), is an Indiana Corporation, which owns and is an operator of the Tanners Creek coal-fired electric power generation plant ("Tanners Creek plant") in Dearborn County, Indiana.

- 12. Defendant Ohio Power Company, d/b/a American Electric Power ("Ohio Power"), is an Ohio Corporation that owns and operates the Muskingum River coal-fired electric power generation plant (the "Muskingum River plant") in Washington and Morgan Counties, Ohio, and owns and is an operator of the Mitchell coal-fired electric power generation plant (the "Mitchell plant") in Marshall County, West Virginia.
- 13. Ohio Power and the Cardinal Operating Company ("Cardinal") own and /or operate the Cardinal coal-fired electric power generation plant (the "Cardinal plant") in Jefferson County, Ohio. Cardinal is an Ohio corporation.
- 14. Defendant Appalachian Power Company, d/b/a American Electric Power (Appalachian Power") is a Virginia corporation. Central Operating Company ("Central") is a West Virginia corporation. Appalachian Power, Central, and Ohio Power, own and/or operate the Philip Sporn coal-fired electric power generation plant (the "Sporn plant") in Mason County, West Virginia.
- 15. Each defendant is a "person" within the meaning of Section 302(e) of the Act, 42 U.S.C. § 7602(e).

STATUTORY BACKGROUND

16. The Clean Air Act is designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population.

Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1).

The National Ambient Air Quality Standards

17. Section 109 of the Act, 42 U.S.C. § 7409, requires the Administrator of EPA to promulgate regulations establishing primary and secondary national ambient air quality standards

("NAAQS" or "ambient air quality standards") for those air pollutants ("criteria pollutants") for which air quality criteria have been issued pursuant to section 108, 42 U.S.C. § 7408. The primary NAAQS are to be adequate to protect the public health, and the secondary NAAQS are to be adequate to protect the public welfare, from any known or anticipated adverse effects associated with the presence of the air pollutant in the ambient air.

- 18. Under Section 107(d) of the Act, 42 U.S.C. § 7407(d), each state is required to designate those areas within its boundaries where the air quality is better or worse than the NAAQS for each criteria pollutant, or where the air quality cannot be classified due to insufficient data. An area that meets the NAAQS for a particular pollutant is an "attainment" area. An area that does not meet the NAAQS is a "nonattainment" area. An area that cannot be classified due to insufficient data is "unclassifiable."
- 19. At times relevant to this complaint, the Tanners Creek plant was located in an area that had been classified as attainment or unclassifiable for one or more of the following pollutants: SO₂, NO_x, PM, and PM-10.
- 20. At times relevant to this complaint, the Muskingum River plant was located in an area that had been classified as attainment or unclassifiable for one or more of the following pollutants: SO₂ NO_x, PM, and PM-10
- 21. At times relevant to this complaint, the Mitchell plant was located in an area that had been classified as attainment or unclassifiable for one or more of the following pollutants: SO_{2} , NO_{x} , PM, and PM-10.

- 22. At times relevant to this complaint, the Cardinal plant was located in an area that had been classified as attainment or unclassifiable for one or more of the following pollutants: SO_{2} , NO_{x} , PM, and PM-10.
- 23. At times relevant to this complaint, the Sporn plant was located in an area that had been classified as attainment or unclassifiable for one or more of the following pollutants: SO_2 , NO_2 , PM, and PM-10.

The Prevention of Significant Deterioration Requirements

- 24. Part C of the Act, 42 U.S.C. §§ 7470-7492, sets forth requirements for the prevention of significant deterioration ("PSD") of air quality in those areas designated as attaining the NAAQS standards. These requirements are designed to protect public health and welfare, to assure that economic growth will occur in a manner consistent with the preservation of existing clean air resources and to assure that any decision to permit increased air pollution is made only after careful evaluation of all the consequences of such a decision and after public participation in the decision making process. These provisions are referred to herein as the "PSD program."
- 25. Section 165(a) of the Act, 42 U.S.C. § 7475(a), among other things, prohibits the construction and operation of a "major emitting facility" in an area designated as attainment unless a permit has been issued that comports with the requirements of Section 165, including the requirement that the facility install the best available control technology for each pollutant subject to regulation under the Act that is emitted from the facility. Section 169(1) of the Act, 42 U.S.C. § 7479(1), designates fossil-fuel fired steam electric plants of more than two hundred and fifty million British thermal units ("Btu's") per hour heat input and that emit or have the potential to emit one hundred tons per year or more of any pollutant to be "major emitting facilities."

26. Section 169(2)(C) of the Act, 42 U.S.C. § 7479(2)(C), defines "construction" as including "modification" (as defined in Section 111(a) of the Act). "Modification" is defined in Section 111(a) of the Act, 42 U.S.C. § 7411(a), to be "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted."

New Source Performance Standards

- 27. Section 111(b)(1)(A) of the Act, 42 U.S.C. § 7411(b)(1)(A), requires the Administrator of U.S. EPA to publish a list of categories of stationary sources that emit or may emit any air pollutant. The list must include any categories of sources which are determined to cause or significantly contribute to air pollution which may endanger public health or welfare.
- 28. Section 111(b)(1)(B) of the Act, 42 U.S.C. § 7411(b)(1)(B), requires the Administrator of U.S. EPA to promulgate regulations establishing federal standards of performance for new sources of air pollutants within each of these categories. "New sources" are defined as stationary sources, the construction or modification of which is commenced after the publication of the regulations or proposed regulations prescribing a standard of performance applicable to such source. 42 U.S.C. § 7411(a)(2). These standards are known as New Source Performance Standards ("NSPS")
- 29. Section 111(e) of the Act, 42 U.S.C. § 7411(e), prohibits an owner or operator of a new source from operating that source in violation of a NSPS after the effective date of the applicable NSPS to such source.

- 30. Pursuant to Sections 111 and 114 of the Act, 42 U.S.C. §§ 7411, 7414, EPA promulgated 40 C.F.R. Part 60, Subpart A, §§ 60.1 60.18, which contains general provisions regarding NSPS.
- 31. 40 C.F.R. § 60.1 states that the provisions of 40 C.F.R. Part 60 apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the publication in Part 60 of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
- 32. 40 C.F.R. § 60.2 defines "affected facility" as any apparatus to which a standard is applicable.
- 33. Pursuant to Section 111(b)(1)(A) of the Act, 42 U.S.C. § 7411(b)(1)(A), at 40 C.F.R. §§ 60.40a-49a (Subpart Da), EPA has identified electric utility steam generating units as one category of stationary sources that cause, or contribute significantly to, air pollution that may reasonably be anticipated to endanger public health or welfare.
- 34. EPA's general NSPS provisions, referred to in paragraph 30, above, apply to owners or operators of any stationary source that contains an "affected facility" subject to regulation under 40 C.F.R. Part 60. EPA has also promulgated NSPS for various industrial categories, including electric utility steam generating units. NSPS requirements for electric utility steam generating units for which construction or modification is commenced after September 18, 1978, are codified at 40 C.F.R. Part 60, Subpart Da, §§ 60.40a-49a.
- 35. The "affected facilities" to which Subpart Da applies are each "electric utility steam generating unit" that is capable of combusting more than 73 megawatts (250 million Btu/hour)

heat input of fossil fuel (either alone or in combination with any other fuel) and for which construction or modification is commenced after September 18, 1978. 40 C.F.R. § 60.40a.

- 36. Under Subpart Da, "steam generating unit" means any furnace, boiler, or other device, other than nuclear steam generators, used for combusting fuel for the purpose of producing steam, including fossil-fuel-fired steam generators associated with combined cycle gas turbines. 40 C.F.R. § 60.41a.
- 37. An "electric utility steam generating unit", under Subpart Da, means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 megawatts ("MW") electrical output to any utility power distribution system for sale. 40 C.F.R. § 60.41a.
- 38. "Modification" under NSPS is defined as "any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted." 40 C.F.R. § 60.2. Under NSPS, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of Section 111 of the Act, 42 U.S.C. § 7411. 40 C.F.R. § 60.14(a).
- 39. Under 40 C.F.R. § 60.14, upon modification, an existing facility becomes an "affected facility" for which the applicable NSPS must be satisfied.

- 40. Section 111(e) of the Act, 42 U.S.C. § 7411(e), prohibits the operation of any new source in violation of an NSPS applicable to such source. Thus, a violation of an NSPS is a violation of Section 111(e) of the Act.
- 41. Pursuant to 40 C.F.R. § 60.7(a)(4), any owner or operator of an affected facility subject to NSPS must furnish written notification to EPA of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies postmarked 60 days or as soon as practicable before the change is commenced with information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change.
- 42. Pursuant to 40 C.F.R. § 60.8, the owner or operator of an affected facility that is an electric utility steam generating unit must conduct a performance test in accordance with 40 C.F.R. § 60.48a within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and furnish EPA a written report of the results of such performance test.
- 43. Pursuant to 40 C.F.R. §§ 60.42a, 60.43a, and 60.44a, the owner or operator of an electric utility steam generating unit subject to Subpart Da, may not discharge into the atmosphere from the affected facility any gases which contain PM, SO₂, or NO_x respectively, in excess of the applicable limitations.

ENFORCEMENT PROVISIONS

44. Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), provides: "Except for a requirement or prohibition enforceable under the preceding provisions of this subsection,

whenever on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of, any other requirement or prohibition of this subchapter . . . the Administrator may ... bring a civil action in accordance with subsection (b) of this section"

- 45. Section 113(b)(2) of the Act, 42 U.S.C. § 7413(b)(2), authorizes the Administrator to initiate a judicial enforcement action for a permanent or temporary injunction, and/or for a civil penalty of up to \$25,000 per day of violation for violations occurring on or before January 30, 1997 and \$27,500 per day for each such violation occurring after January 30, 1997, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701, against any person whenever such person has violated, or is in violation of, requirements of the Act other than those specified in Section 113(b)(1), 42 U.S.C. § 7413(b)(1), including violations of Section 165(a), 42 U.S.C. § 7475(a) and Section 111, 42 U.S.C. § 7411.
- 46. Section 167 of the Act, 42 U.S.C. § 7477, authorizes the Administrator to initiate an action for injunctive relief, as necessary to prevent the construction, modification or operation of a major emitting facility which does not conform to the PSD requirements.
- 47. At all times pertinent to this civil action, defendant AEP Service Corp. was an operator of each unit of each facility that are the subjects of the claims for relief in this complaint.
- 48. At all times pertinent to this civil action, defendant Indiana Michigan Power was an owner and operator of each unit of the Tanners Creek plant.

- 49. At times pertinent to this civil action, defendant Ohio Power was an owner and operator of each unit of the Muskingum River and Mitchell plant facilities, and was an owner and/or operator of units of the Cardinal and Sporn plants.
- 50. At times pertinent to this civil action, defendant Cardinal was an owner and/or operator of units of the Cardinal plant.
- 51. At times pertinent to this civil action, defendants Appalachian Power and Central were owners and/or operators of units of the Sporn plant.
- 52. At all times pertinent to this civil action, the Tanners Creek, Muskingum, Mitchell, Cardinal, and Sporn plants were "major emitting facilities" and "major stationary sources," within the meaning of the Act for NO_x, SO₂, and PM. Units 3, 4, and 5 of the Muskingum plant and units 1 and 2 of the Cardinal plant were "affected sources" subject to the requirements of NSPS.

FIRST CLAIM FOR RELIEF

(PSD Violations: Modifications at the Tanners Creek Plant)

- 53. Paragraphs 1 through 52 are realleged and incorporated herein by reference.
- 54. At various times, defendants AEP Service Corp. and Indiana Michigan Power commenced construction of modifications, as defined in the Act, at the Tanners Creek Plant. These modifications included, but are not limited to, the following modifications or combinations of modifications: (1) the replacement during or about 1988 of the outlet bank and outlet tube assemblies for the reheater, the primary superheater outlet tube assemblies, outlet headers, and vestibule casing for Unit 3; (2) the replacement of eleven cyclone furnaces during or about 1987; (3) the replacement during or about 1992 of the Unit 4 tubular air heater; (4) the replacement during or about 1989 of the furnace arch and floor tubes for Unit 4; and (5) the

replacement during or about 1995 of the primary furnace floor and side wall tube panels for Unit
5. Defendants AEP Service Corp. and Indiana Michigan Power constructed additional
modifications to the Tanners Creek plant beyond those described in this paragraph.

- 55. Defendants AEP Service Corp. and Indiana Michigan Power violated and continue to violate Section 165(a) and 167 of the Act, 42 U.S.C. §§ 7475(a) and 7477, by, among other things, undertaking such "modifications" and continuing to operate the facility without (1) obtaining a PSD permit; and (2) applying best available control technology for NO_x, SO₂, and PM as required.
- 56. Unless restrained by an order of this Court, these and similar violations of the Act will continue.
- 57. As provided in Section 113(b)(2) of the Act, 42 U.S.C. § 7413(b)(2), and Section 167 of the Act, 42 U.S.C. § 7477, the violations set forth above subject defendants AEP Service Corp. and Indiana Michigan Power to injunctive relief and civil penalties of up to \$25,000 per day for each violation prior to January 30, 1997, and \$27,500 per day for each such violation after January 30, 1997, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701.

SECOND CLAIM FOR RELIEF

(PSD Violations: Modifications at the Muskingum River Plant)

- 58. Paragraphs 1 through 52 are realleged and incorporated herein by reference.
- 59. At various times, defendants AEP Service Corp. and Ohio Power commenced construction of modifications, as defined in the Act, at the Muskingum River Plant. These modifications included, but are not limited to, the following modifications or combinations of modifications: (1) the replacement, during approximately 1987 through 1989, of 10 substantially

redesigned cyclone furnaces, primary burners, and related equipment, constructed at Units 3 and 4; (2) the replacement, during approximately 1988, of the roof tubing at Units 1, 2, 3, and 4; (3) the replacement, during approximately 1988, of the inlet and outlet tube assemblies for the secondary superheaters at Units 1 and 2; (4) the replacement from approximately 1980 through 1981 of the secondary superheater outlets, reheat inlets, intermediate and outlet platens, for Units 3 and 4; (5) the replacement of all five pulverizers at Unit 5 and the addition of ten burners constructed on the front and rear walls of the primary furnace from approximately 1979 through 1980; (6) the removal of the primary superheater from Unit 5 and the installation of wingwalls and the replacement of a redesigned horizontal reheater from approximately 1980 through 1981; and (7) the redesign and replacement during or about 1985 of an upgraded economizer for Unit 5; and (8) the removal and replacement of the lower furnace tubes for Unit 5 in about 1992. Defendants AEP Service Corp. and Ohio Power constructed additional modifications to the Muskingum plant beyond those described in this paragraph.

- 60. Defendants AEP Service Corp. and Ohio Power violated and continue to violate Section 165(a) and 167 of the Act, 42 U.S.C. §§ 7475(a) and 7477, by, among other things, undertaking such "modifications" and continuing to operate the facility without (1) obtaining a PSD permit; and (2) applying best available control technology for NO_x and PM as required.
- 61. Unless restrained by an order of this Court, these and similar violations of the Act will continue.
- 62. As provided in Section 113(b)(2) of the Act, 42 U.S.C. § 7413(b)(2), and Section 167 of the Act, 42 U.S.C. § 7477, the violations set forth above subject defendants AEP Service Corp. and Ohio Power to injunctive relief and civil penalties of up to \$25,000 per day for each

violation prior to January 30, 1997, and \$27,500 per day for each such violation after January 30, 1997, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701.

THIRD CLAIM FOR RELIEF

(PSD Violations: Modifications at the Mitchell Plant)

- 63. Paragraphs 1 through 52 are realleged and incorporated herein by reference.
- 64. At various times, defendants AEP Service Corp. and Ohio Power commenced construction of modifications, as defined in the Clean Air Act, at the Mitchell plant. These modifications included, but are not limited to, the following modifications or combinations of modifications: (1) the replacement of the low pressure reheat outlet banks on both Units 1 and 2 from approximately 1992 through 1993; (2) the conversion and redesign of the #15 MBF pulverizer to an MPS-89 pulverizer on Unit 1 from approximately 1990 through 1991; (3) the replacement of all front tube screens on Unit 1 in approximately 1997; (4) replacement of all tubes in the main condensers in Units 1 and 2 in approximately 1989; and (5) installation of a redesigned economizer on Units 1 and 2 from approximately 1987 through 1988. Defendants AEP Service Corp. and Ohio Power constructed additional modifications to the Mitchell plant beyond those described in this paragraph.
- 65. Defendants AEP Service Corp. and Ohio Power violated and continue to violate Sections 165(a) and 167 of the Act, 42 U.S.C. §§ 7475(a) and 7477, by, among other things, undertaking such "modifications" and continuing to operate the facility without (1) obtaining a PSD permit; and (2) applying best available control technology for NO_x, SO₂, and PM as required.

- 66. Unless restrained by an order of this Court, these and similar violations of the Act will continue.
- 67. As provided in Section 113(b)(2) of the Act, 42 U.S.C. § 7413(b)(2), and Section 167 of the Act, 42 U.S.C. § 7477, the violations set forth above subject Defendants to injunctive relief and civil penalties of up to \$25,000 per day for each violation prior to January 30, 1997, and \$27,500 per day for each such violation after January 30, 1997, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701.

FOURTH CLAIM FOR RELIEF

(PSD Violations: Modifications at the Cardinal Plant)

- 68. Paragraphs 1 through 52 are realleged and incorporated herein by reference.
- 69. At various times, defendants AEP Service Corp., Ohio Power and/or Cardinal commenced construction of modifications, as defined in the Act, at the Cardinal plant. These modifications included, but are not limited to, the following modifications or combinations of modifications: (1) the replacement of all five pulverizers at Unit 1 and the addition of ten burners constructed on the front and rear walls of the primary furnace from approximately 1980 through 1981; (2) the removal of the horizontal primary superheater from Unit 1 and the addition of wingwalls and the replacement of a redesigned horizontal reheater constructed from approximately 1981 through 1982; (3) the replacement of a redesigned economizer for Unit 1 in approximately 1989; (4) the replacement of all five pulverizers at Unit 2 and the addition of ten burners constructed on the front and rear walls of the primary furnace from approximately 1979 through 1980; (5) the removal of the horizontal primary superheater from Unit 2 and the addition of wingwalls and the replacement of a redesigned horizontal reheater from approximately 1980 through 1981; (6) the replacement of a redesigned economizer for Unit 2 in approximately 1989;

and (7) replacement of most or all of the components of the lower primary furnaces for Units 1 and 2 from about 1992 through 1993. Defendants AEP Service Corp., Ohio Power, and/or Cardinal constructed additional modifications to the Cardinal plant beyond those described in this paragraph.

- 70. Defendants AEP Service Corp., Ohio Power, and/or Cardinal violated and continue to violate Section 165(a) and 167 of the Act, 42 U.S.C. §§ 7475(a) and 7477, by, among other things, undertaking such "modifications" and continuing to operate the facility without (1) obtaining a PSD permit; and (2) applying best available control technology for NO_x, and PM, as required.
- 71. Unless restrained by an order of this Court, these and similar violations of the Act will continue.
- 72. As provided in Section 113(b)(2) of the Act, 42 U.S.C. § 7413(b)(2), and Section 167 of the Act, 42 U.S.C. § 7477, the violations set forth above subject defendants AEP Service Corp., Ohio Power and/or Cardinal to injunctive relief and civil penalties of up to \$25,000 per day for each violation prior to January 30, 1997, and \$27,500 per day for each such violation after January 30, 1997, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701.

FIFTH CLAIM FOR RELIEF

(PSD Violations: Modifications at the Philip Sporn Plant)

- 73. Paragraphs 1 through 52 are realleged and incorporated herein by reference.
- 74. At various times, defendants AEP Service Corp., Appalachian Power, Ohio Power, and/or Central commenced construction of modifications, as defined in the Clean Air Act, at the Philip Sporn plant. These modifications included, but are not limited to, the following

modifications or combinations of modifications: (1) the replacement of the lower waterwall headers in the rear and side wall in Unit 1 in approximately 1990; (2) the replacement of the rear and side wall lower furnace headers and the sealing of the skirt and trough on Units 2, 3, and 4 from approximately 1990 through 1991; (3) replacement of all tubes in the main condensers in Units 1, 2, and 4 from approximately 1990 through 1991; (4) replacement of the primary and reheat and superheater outlet banks and outlet headers in Unit 4 during approximately 1990; and (5) replacement of all lower furnace tubes and related components in Unit 5 in approximately 1993. Defendants AEP Service Corp., Appalachian Power, Ohio Power, and/or Central constructed additional modifications to the Sporn plant beyond those described in this paragraph.

- 75. Defendants AEP Service Corp., Appalachian Power, Ohio Power, and/or Central violated and continue to violate Sections 165(a) and 167 of the Act, 42 U.S.C. §§ 7475(a) and 7477, by, among other things, undertaking such "modifications" and continuing to operate the facility without (1) obtaining a PSD permit; and (2) applying best available control technology for NO_x, SO₂ and PM as required.
- 76. Unless restrained by an order of this Court, these and similar violations of the Act will continue.
- 77. As provided in Section 113(b)(2) of the Act, 42 U.S.C. § 7413(b)(2), and Section 167 of the Act, 42 U.S.C. § 7477, the violations set forth above subject defendants AEP Service Corp., Appalachian Power, Ohio Power, and/or Central to injunctive relief and civil penalties of up to \$25,000 per day for each violation prior to January 30, 1997, and \$27,500 per day for each

such violation after January 30, 1997, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701.

SIXTH CLAIM FOR RELIEF

(NSPS violations: at Muskingum Plant)

- 78. Paragraphs 1 through 52 are realleged and incorporated herein by reference.
- 79. Defendants AEP Service Corp. and Ohio Power are the owners or operators, within the meaning of Section 111(a)(5) of the Act, 42 U.S.C. § 7411(a)(5), and 40 C.F.R. § 60.2, within the meaning of 40 C.F.R. §§ 60.40a and 60.41a, of certain electric utility steam generating units, designated Units 3, 4, and 5 located at the Muskingum Plant.
- 80. Units 3, 4, and 5 are each "affected facilities" under Subparts A and Da of NSPS and are subject to the NSPS, including provisions of Subpart A and Da of the NSPS.
- 81. Defendants AEP Service Corp. and Ohio Power conducted modification activities upon Units 3, 4, and 5, thereby increasing the gross megawatt generation capacity at such units and the maximum hourly emission rate of SO₂, NO_x, and PM from such units above the maximum hourly emissions achievable at such units. Specifically, AEP Service Corp. and Ohio Power: (1) replaced the secondary superheater outlet, reheat, inlet, intermediate, and outlet platens for Unit 3 during approximately 1980; (2) replaced the secondary superheater outlet, reheat inlet, intermediate, and outlet platens for Unit 4 during approximately 1981; (3) removed all five pulverizers at Unit 5 and replaced them with five upgraded and redesigned pulverizers and added ten burners constructed on the front and rear walls of the primary furnace from approximately 1979 through 1980; (4) removed the primary superheater from Unit 5 and added wingwalls and a redesigned horizontal reheater to increase the Unit's capacity from approximately 1980 through 1981; and (5) replaced five 700 horsepower primary air fan motors

with 900 horsepower primary air fan motors at Unit 5 during approximately 1988. Each project constituted a "modification" of an "affected facility" as those terms are defined in the NSPS. 40 C.F.R. §§ 60.2 and 60.14(a). The modification activities took place after September 18, 1978.

- 82. With regard to such modification activities, defendants AEP Service Corp. and Ohio Power failed to furnish written notification to EPA in accordance with the requirements of 40 C.F.R. § 60.7(a)(4) of any physical or operational change to the affected facilities which may increase the emission rate of any air pollutant to which a standard applies postmarked 60 days or as soon as practicable before each change is commenced with information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change as required by 40 C.F.R. § 60.7(a).
- 83. Defendants AEP Service Corp. and Ohio Power failed to conduct performance tests in accordance with the procedures required by § 60.48a within 60 days after achieving the maximum production rate for each unit modified, but in no event later than 180 days after initial startup, after each modification and furnish a written report of the results of such performance tests to EPA after each modification in violation of 40 C.F.R. § 60.8. § 60.48a.
- 84. Defendants AEP Service Corp. and Ohio Power failed to comply and continue to fail to comply with the NSPS emissions requirements for at least one of the following pollutants -- PM, SO₂, and NO_x -- after the modification activities in violation of 40 C.F.R. §§ 60.42a, 60.43a, and 60.44a.

- 85. Each day that defendants AEP Service Corp. and Ohio Power fail to comply with each of the NSPS requirements described in this Complaint, constitutes a violation of the federal NSPS regulations, and the Act.
- 86. Pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b), defendants AEP Service Corp. and Ohio Power are subject to injunctive relief and civil penalties up to \$25,000 per day of each violation occurring on or before January 30,1997 and \$27,500 per day for each such violation occurring after January 30, 1997 pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701. Unless enjoined by this Court, defendants will continue to violate the requirements of the NSPS and the Act.

SEVENTH CLAIM FOR RELIEF (NSPS violations: at Cardinal Plant)

- 87. Paragraphs 1 through 52 are realleged and incorporated herein by reference.
- 88. Defendants AEP Service Corp., Ohio Power, and Cardinal are the "owners or operators," within the meaning of Section 111(a)(5) of the Act, 42 U.S.C. § 7411(a)(5), and 40 C.F.R. § 60.2, of certain electric utility steam generating units, designated Units 1 and 2, located at the Cardinal plant.
- 89. Units 1 and 2 are each "affected facilities" under Subparts A and Da of NSPS and are subject to the NSPS, including provisions of Subpart A and Da of the NSPS.
- 90. Defendants AEP Service Corp., Ohio Power, and Cardinal conducted modifications upon Units 1 and 2, thereby increasing the gross megawatt generation capacity at such units and the maximum hourly emission rate of SO₂, NO_x, and PM from such units above the maximum hourly emissions achievable at such units. Specifically, AEP Service Corp., Ohio Power, and Cardinal: (1) removed all five pulverizers at Unit 1 and replaced them with five upgraded and

redesigned pulverizers and added ten burners constructed on the front and rear walls of the primary furnace during approximately 1980 through 1981; (2) removed the primary superheater from Unit 1 and added wingwalls and a redesigned horizontal reheater during approximately 1981 through 1982; (3) replaced five 700 horsepower primary air fan motors with 900 horsepower primary air fan motors at Units 1 and 2 during approximately 1987; (4) removed all five pulverizers at Unit 2 and replaced them with five upgraded and redesigned pulverizers and added ten burners constructed on the front and rear walls of the primary furnace during approximately 1979 through 1980; and (5) removed the primary superheater from Unit 2 and added wingwalls and a redesigned horizontal reheater during approximately 1980 through 1981. Each project constituted a "modification" of an "affected facility" as those terms are defined in the NSPS. 40 C.F.R. § 60.2. These activities took place after September 18, 1978.

- 91. With regard to such modification activities, defendants AEP Service Corp., Ohio Power, and Cardinal failed to furnish written notification to EPA in accordance with the requirements of 40 C.F.R. § 60.7(a)(4) of any physical or operational change to the affected facilities which may increase the emission rate of any air pollutant to which a standard applies postmarked 60 days or as soon as practicable before each change is commenced with information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change as required by 40 C.F.R. § 60.7(a).
- 92. Defendants AEP Service Corp., Ohio Power, and Cardinal failed to conduct a performance test in accordance with the procedures required by § 60.48a within 60 days after achieving the maximum production rate for each unit modified, but in no event later than 180

days after initial startup, after each modification and furnish a written report of the results of such performance tests to EPA after each modification in violation of 40 C.F.R. § 60.8. § 60.48a.

93. Defendants AEP Service Corp., Ohio Power, and Cardinal failed to comply and continue to fail to comply with the NSPS emissions requirements after the modification activities for at least one

of the following pollutants -- PM, SO_2 , and NO_{x_1} -- after the modification activities in violation of 40 C.F.R. §§ 60.42a, 60.43a, and 60.44a.

- 94. Each day that defendants AEP Service Corp., Ohio Power, and Cardinal fail to comply with each of the NSPS requirements described in this Complaint, constitutes a violation of the federal NSPS regulations, and the Act.
- 95. Pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b), defendants AEP Service Corp. Ohio Power, and Cardinal are subject to injunctive relief and civil penalties up to \$25,000 per day for each violation occurring on or before January 30, 1997 and \$27,500 per day for each such violation occurring after January 30, 1997 pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701. Unless enjoined by this Court, defendants AEP Service Corp., Ohio Power, and Cardinal will continue to violate the requirements of the NSPS and the Act.

PRAYER FOR RELIEF

WHEREFORE, based upon all the allegations contained in paragraphs 1 through 95 above, the United States of America requests that this Court:

1. Permanently enjoin each of the defendants from operating all units at the Tanners Creek, Muskingum, Mitchell, Cardinal, and Philip Sporn plants, including the construction of

future modifications, except in accordance with the Clean Air Act and any applicable regulatory requirements;

- 2. Order each defendant to remedy their past violations by, among other things, requiring them to install, as appropriate, the best available control technology on the units at the plants that they own or operate for each pollutant subject to regulation under the Clean Air Act;
- 3. Order the defendants to apply for permits for their respective facilities that are in accordance with the PSD program.
 - 4. Order the defendants to comply with the NSPS provisions of the Act;
- 5. Order the defendants to conduct audits of their operations to determine if any additional modifications have occurred which would require them to meet the requirements of PSD and NSPS and report the results of this audit to the United States;
- 6. Order the defendants to take other appropriate actions to remedy, mitigate, or offset the harm to public health and the environment caused by the violations of the Act alleged above;
- 7. Assess a civil penalty against of up to \$25,000 per day for each violation of the Clean Air Act and applicable regulations, and \$27,500 per day for each such violation after January 30, 1997;
 - 8. Award Plaintiff its costs of this action; and,

9. Grant such other relief as the Court deems just and proper.

Respectfully Submitted,

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